

NEW SPECIES OF *UROSIGALPHUS* (HYMENOPTERA:
BRACONIDAE) FROM MEXICO

LESTER P. GIBSON

U.S. Department of Agriculture, Forest Service, Northeastern Forest
Experiment Station, Delaware, Ohio 43015.

Abstract.—Two new species of *Urosigalphus* subgenus *Neourosigalphus* Gibson are described, *yucatanensis* and *meridianus*. A key to Mexican and Central American species is presented.

The subgenus *Neourosigalphus* was established by Gibson (1972a) and now includes 23 species of which four are known from Mexico and Central America (Gibson, 1972b). Two new species of this subgenus, from Mexico, are described in this paper. Both belong to a group of *Neourosigalphus* that bear carapace tubercles and have 14 antennal segments. They do not resemble previously described species from Mexico but do resemble some South American species.

KEY TO SPECIES OF THE SUBGENUS *NEUROSIGALPHUS* FROM
MEXICO AND CENTRAL AMERICA

1. Carapace with apical tubercles; 14 antennal segments 4
- Carapace without apical tubercles; 15 or 16 antennal segments 2
2. Antenna 15 segmented; antenna dark brown; hindfemur testaceous 3
- Antenna 16 segmented; antenna medium brown, hindfemur red brown *avocadoe* Gibson
3. Palpi yellow; tegula dark testaceous, mesopleuron impunctate centrally *punctifrons* Crawford
- Palpi brown to dark brown, tegula dark red black, mesopleuron sparsely punctate centrally *neopunctifrons* Gibson
4. Carapace tubercles long and well developed, 0.2 mm long (Fig. 3), ♀ with ovipositor as long as carapace length *flavens* Gibson
- Carapace tubercles short, less than 0.12 mm long (Figs. 1, 2), ♀ with ovipositor $\frac{2}{3}$ as long as carapace length 5
5. Palpi yellow; wings tinted brown; hindcoxa orange
- *yucatanensis*, new species

- Palpi light to medium brown; wings clear; hindcoxa brown
 *meridianus*, new species

Urosigalphus (Neurosigalphus) yucatanensis Gibson, New Species

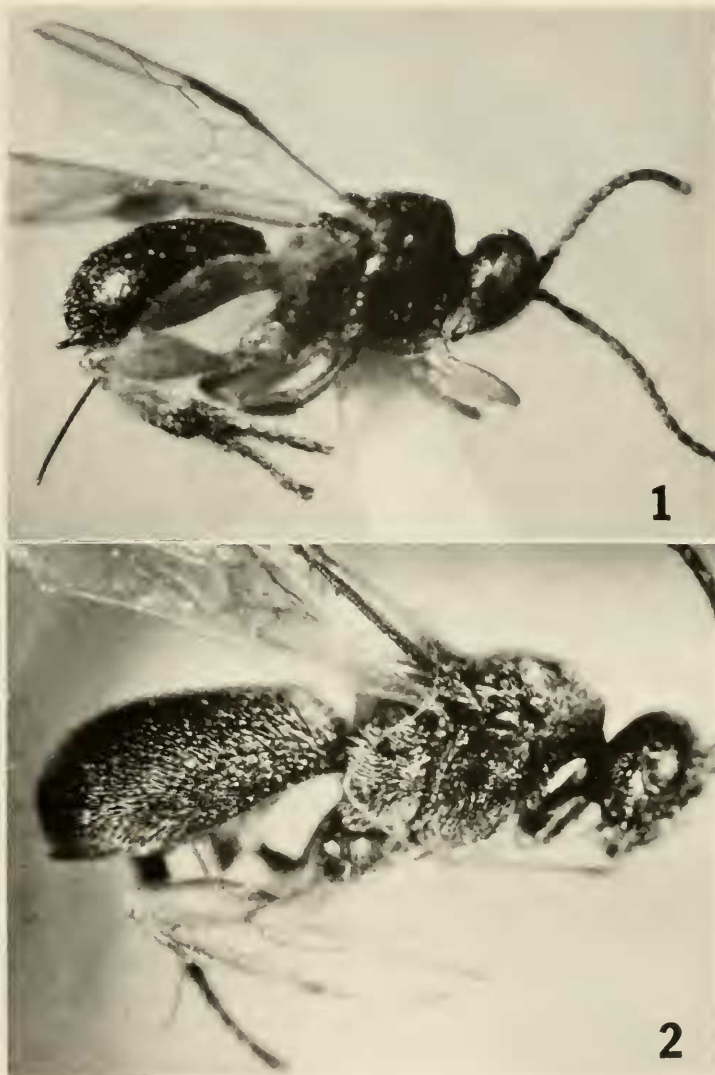
Fig. 1

General features.—Length 2.5 mm. Head and thorax deep red brown; carapace dark red brown; abdomen brown; clypeus red apically; labrum rufotestaceous; mandible rufotestaceous, with red base and apex; palpi pale yellow; antenna medium brown, lighter ventrally and on scape and pedicel. Fore- and midlegs yellow tan; hindcoxa and femur orange and hindtibia and tarsus medium brown. Tegula light red brown. Wings tinted brown, with brown hairs, costa light brown basally and medium brown apically; stigma dark brown; the remaining veins medium brown distally but paler basally.

Female.—*Head*: General anterior outline roundly quadrate. Vertex finely rugoso-punctate, temples and genal regions finely punctured. Lower face rounded, evenly finely punctate; fronto-clypeal groove with an oval anterior tentorial pit near each end. Clypeus elongate quadrate; lower central margin gently concave. Mandible teeth long and narrow, outer surface rugose. Ocelli circular, interocellar area slightly raised. Antennal scapes well separated with area between fossae finely rugoso-punctate and with a shallow, broad, finely punctate antennal sulcus extending to rear ocelli. Antenna 14-segmented; scape long and relatively slender, inner margin slightly rounded; pedicel almost $\frac{1}{2}$ as long as scape. Occipital carina complete.

Thorax: Unevenly punctate. Mesonotum fairly regularly punctate, general surface uneven; notaulices broad, deep, with large foveae, area of convergence broad, rather quadrate, depressed, with large carinate punctures; median lobe densely finely punctate with a small, short central carina anteriorly; lateral lobes gently flattened, finely punctured with a lateral border of carinate punctures; posterolateral carina weakly flangelike. Scutellar groove with 5 dissecting carinae. Scutellum roundly trigonal in dorsal profile, rugoso-carinate; posterior surface abruptly sloped. Propodeum flat posteriorly with a strong transverse carina; central dorsal carina absent, transverse carina proceeds down both sides in an arc to the point of abdominal articulation; dorsal surface narrow with irregular rugae delimiting irregular depressions; posterior surface roughly and densely rugoso-punctate; lateral areas coarsely rugoso-punctate. Mesopleuron punctate; middle central area impunctate, lower anterior area with large carinate punctures in a mesopleural groove; mesosternum punctate with very small longitudinal carinae. Lateral regions of pronotum coarsely punctate, upper posterior corner with a slight bend and with triangular area behind with 2 large punctures separated by a carina. Wings tinted brownish; submedian cell longer than the median basally.

Abdomen: Carapace oval in dorsal and lateral views, longitudinally ru-



Figs. 1-2. 1, *Urosigalphus (Neurosigalphus) yucatanensis*, type. 2, *U. (N.) meridianus*, type.

goso-punctate anteriorly, densely punctate and shiny posteriorly, apex with 2 small apical spines, 0.12 mm long (Fig. 1). Ovipositor 1.0 mm long, nearly $\frac{2}{3}$ as long as carapace, ovipositor sheath reddish brown.

Male.—Unknown.

Holotype.—♀, Progreso, Yucatán, Mexico; 23-VII-62; H. E. Evans Collector. In MCZC.



Fig. 3. *Urosigalphus (Neurosigalphus) flavens*.

Distribution.—Mexico: Yucatán.

Biology and host.—Unknown.

Urosigalphus (Neurosigalphus) meridianus Gibson, New Species

Fig. 2

General features.—Length 3.0–3.5 mm. Head and thorax black; carapace dark red black to black; abdomen medium to dark red brown; clypeus black, labrum maroon to red black; mandible tan with base and apex dark red; palpi light to medium brown, antenna medium to dark brown. Fore- and midlegs yellow tan; hindfemur yellow tan to orange, hindtibia medium brown and tarsus dark brown; all coxae usually brown to dark brown, darker than femora. Tegula dark red brown or red black. Wings clear, hyaline with brown hairs, costa, stigma, and veins medium to dark brown distally but veins becoming paler basally.

Female.—Differs from *yucatanensis* as follows: *Head*: Temples, and genal regions finely to moderately rugoso-punctate. Lower face evenly finely rugoso-punctate; anterior tentorial pit round. Mandible teeth long but broad. Area between antennal fossae finely rugoso-punctate and bicarinate with a small central carina immediately anterior to median ocellus, and a rugoso-punctate antennal sulcus.

Thorax: Notaulices broad but shallow with moderate punctures, area of convergence depressed with moderate to large punctures; lateral lobes densely finely punctured with a foveolate lateral carina. Scutellar groove with 3 dissecting carinae. Scutellum coarsely rugoso-punctate throughout. Propodeum flattened posteriorly with a moderately strong transverse carina; central dorsal carina short and moderate, lateral areas rather irregularly carinate and rugoso-punctate. Lower anterior area of mesopleuron with moderate punctures in a mesopleural groove; mesosternum punctate with a line of large sized punctures along center line and transverse carinae dis-

tally. Lateral regions of pronotum irregularly punctured, medially sparsely punctate. Wings clear.

Abdomen: Carapace elongate oval in dorsal and lateral views, rugoso-punctate posteriorly, apex with small apical spines, 0.04 mm long (Fig. 2). Ovipositor 1.2 mm long, $\frac{2}{3}$ as long as carapace, ovipositor sheath reddish black.

Male.—Unknown.

Holotype.—♀, Mexico. Yuriria, Guanajuato, 6500', 7-VIII-62, H. E. Evans Collector. In MCZC.

Paratypes.—1 ♀ Patzcuaro, Michoacán, 15-VII-1965, H. E. Evans; 1 ♀ Chilpancingo, Guerrero, 3800', 30-VII-1962, H. E. Evans (in MCZC). 1 ♀ Guadalajara, Jal., 23-28-VII-1965, H. E. Evans (in Rijksmuseum van Natuurlijke Historie).

Distribution.—Mexico: Guanajuato, Michoacán, Guerrero, Jalisco.

Biology and host.—Unknown.

ACKNOWLEDGMENTS

I thank Alfred F. Newton, Jr. of the Museum of Comparative Zoology, Harvard University, Cambridge, Massachusetts (MCZC) and Kees van Achterberg of the Rijksmuseum van Natuurlijke Historie, Leiden, Netherlands for the loan of specimens.

LITERATURE CITED

- Gibson, L. P. 1972a. Revision of the Genus *Urosigalphus* of the United States and Canada (Hymenoptera: Braconidae). Misc. Publ. Entomol. Soc. Am. 8(3 & 4): 83-134.
———. 1972b. *Urosigalphus* of Mexico and Central America (Hymenoptera: Braconidae). Misc. Publ. Entomol. Soc. Am. 8(3 & 4): 135-157.